

# **How Social Exclusion Influences Levels of Aspiration in Selecting Potential Mates: The Mediating Role of State Self-Esteem.**

---

A Thesis Submitted  
in Partial  
Fulfilment of the Requirements for the  
Degree of Master of Science in  
Psychology at the  
University of Canterbury  
by  
**Sarah Robins.**

---

University of Canterbury  
2002

## **Acknowledgements**

I am indebted to a number of people for their guidance, support and encouragement in the production of this thesis. My thanks first and foremost go to my supervisor, Dr. Bruce Ellis, who contributed to all aspects of this thesis with expertise, patience and good humour. His attention to detail, advice and leadership was invaluable.

I would like to thank Ass. Prof. Garth Fletcher for his feedback on a number of issues, and to Fredrick Durel, for the development of the computer programme used in this study.

A huge debt of thanks to my faithful and often long-suffering confederates, who made the study so much more realistic than it might otherwise have been. Also to the participants in the study, who put up with some unpleasant feedback and still managed to smile at the end of it.

A special thanks goes to my good friend and colleague Tanzi Bennison for her constant reassurance, assistance and support throughout the entire process.

I would also like to thank my darling son James for his patience, tenacity and encouragement. Finally my Mum, without whose help and unfailing belief in my ability, this thesis would not have been possible.

Contents

**Abstract.....1**

**Introduction.....2**

Evolutionary Theory.....3

Self-Esteem Theory.....5

    The Function of Self-Esteem.....5

    The Self-Esteem Motive.....5

    Social Inclusion.....6

    Fluctuations in Self-Esteem.....6

Gender Differences.....6

Sociometer Theory .....7

Social Exchange Model..... 9

Specific Functional Model.....9

Self-Perceived Mating Success.....10

The Current Study.....11

**Method.....12**

Overview.....12

Participants.....12

Procedure.....13

    Phase One: Pre-Testing.....13

    Phase Two: Experimental Manipulation.....13

    Phase Three: Dependent Measures.....16

        Post-test state self-esteem.....16

        Mate aspiration levels.....17

        Construction of stimulus profiles: Personality descriptions.....17

        Construction of stimulus profiles: Photographs.....18

        Construction of complete profiles viewed by participants.....19

        Mate aspiration ratings.....19

    Phase Four: Manipulation Checks and Debriefing.....21

**Results.....22**

Manipulation Check.....22

Self-Feelings.....23

Mate Aspiration Levels.....25

Mediational Analyses.....27

**Discussion.....29**

**References.....35**

**Appendices.....43**

Appendix A – Pre-test state self-esteem scale.....43

Appendix B – Information sheet.....44

Appendix C – Consent form.....45

Appendix D – Demographics questionnaire.....46

Appendix E – Confederate feedback sheets.....47

Appendix F – Post-test state self-esteem scale.....48

Appendix G – Profile evaluation form.....49

Appendix H – Example of high and low personal descriptions.....50

Appendix I – Personality description pre-rating scale.....52

Appendix J – Photo pre-rating scale.....53

Appendix K – Feedback evaluation form/manipulation check.....54

## Abstract

There is considerable empirical evidence to support the notion that people with similar mate values end up together (Buss, 1985; Kenrick, Groth, Trost and Sadalla, 1993; Gilbert, Price and Allan, 1995; Kalick and Hamilton, 1986; Lalumiere, Seto and Quinsey, 1995). The goal of the present study was to examine how social inclusion and exclusion interacts with state self-esteem to predict levels of aspiration in choosing potential mates. The research tests predictions based on a recent evolutionary psychological theory of the function of self-esteem. This theory conceptualises self-esteem as constituting a variety of specific information-processing systems that monitor successes and failures in distinct types of social relationships and then uses this comparative information to guide decision-making and behavioural strategies in these relationships (Kirkpatrick and Ellis, 2001). Leary, Tambor, Terdal and Downs (1995) posited that people have internal gauges that monitor their levels of acceptance and rejection from relevant others. This internal gauge has been defined as a 'sociometer', which monitors inclusionary status more or less continuously for cues that connote disapproval, rejection, or exclusion. The sociometer alerts the individual to changes in inclusionary status (particularly social acceptance), and motivates behaviour to restore inclusionary status when threatened. Kirkpatrick and Ellis (2001) suggest that there is a mating-specific sociometer that tracks acceptance and rejection by the opposite sex. The current research tests the hypothesis that experiences of social exclusion will result in lowered aspiration levels in selecting mates, and that the relation will be mediated by lowered state self-esteem. The results were largely consistent with the research hypothesis: participants that were exposed to negative feedback from opposite-sex others did rate themselves as being more well matched to the lower socially attractive profiles, and mate aspiration levels could be partially accounted for by variations in state self-esteem. More research is needed to examine the link between mating strategies and other domains, i.e. same-sex peer aspirations levels.

## **How Social Exclusion Influences Levels Of Aspiration In Selecting Potential Mates: The Mediating Role Of State Self-Esteem.**

### General Introduction

The field of social psychology has long recognised the existence of a self-esteem system, which is responsible for assessing self-feelings. James (1890) described self-esteem as “similar to a barometer that rises and falls as a function of one’s aspirations and success experiences” (Heatherton and Polivy, 1991: 895). Consistent with this view is the idea that, whilst people’s overall self-feelings are an average of numerous social interactions, individual experiences are situation specific, thus promoting particular behavioural responses. Leary et al., (1995) proposed a sociometer theory of self-esteem, which posits that an internal, psychological gauge constantly monitors how well one is faring in interpersonal situations.

Self-esteem is a broad term that can be separated into two distinct concepts, trait and state self-esteem. Trait self-esteem is the overall or typical level of self-esteem. State self-esteem is the quality of a person’s self-feelings in a particular situation at a particular time (Leary and Downs, 1995). In a study designed to develop a scale for measuring state self-esteem, Heatherton and Polivy (1991) found a substantial correlation between state and trait self-esteem. They suggested that each person’s self-esteem fluctuates around a baseline level, and it returns to that baseline level shortly after the effects of the day’s events have worn off. It is the intention of this study to focus on the self-feelings of individuals in particular social situations, i.e. their state self-esteem following social acceptance/rejection from opposite-sex others.

In a recent article by Kurzban and Leary (2001) which examined stigmatisation and the functions of social exclusion, the importance of social rejection was highlighted. The

authors posited that “People who feel socially alienated or rejected are susceptible to a host of behavioural, emotional, and physical problems, suggesting that human beings may possess a fundamental need to belong” (Kurzban and Leary, 2001: 187). This idea is consistent with an evolutionary theory of self-esteem (Gangstad and Simpson, 2000). Group inclusion is not an assumption of social relationships, rejection or exclusion from socially significant groups is a regular feature of humans’ everyday life. According to Baumeister and Leary (1995) fear of being rejected from social relationships is profoundly entrenched and quite possibly has some innate basis, that is, fear associates positively with many events or symbols representing social rejection. It follows that fear of social exclusion should influence different types of self-feelings, i.e. negative affect. Events that may be fear inducing, such as self-perceived opposite sex rejection, could influence specific self-feelings.

Is there is a connection between self-esteem, social exclusion and mate aspiration levels? It is hypothesised that comparisons with other members of one’s own sex plays a major role in self-evaluations of mate value, whereas comparisons between members of the opposite sex assume a larger role in the evaluation of potential mates (Ellis, Simpson, & Campbell, in press). The potential mate that we aspire to attain is based on our estimation of our own mate value and that in turn is based on our evaluation of ourselves in specific situations (Kirkpatrick and Ellis, 2000). This study posits that experiences of social exclusion will influence individual aspiration levels in selecting potential mates and this relation will be mediated by state self-esteem.

### Evolutionary Theory

From an evolutionary perspective social inclusion is a fundamental prerequisite for survival. It is important to be included in order to receive the benefits from group living, such as access to resources and defence against predators. It follows that group inclusion gives access to potential mating partners and that successful reproduction is possible only

with the formation and maintenance of mating relationships (Buss, 1999). Evolutionary theory posits that there are no interpersonal relationships more important than mating relationships. If attracting and maintaining mates is crucial to successful reproduction, then specialised systems should be designed to assess one's success in the 'mating game'.

It is consistent with an evolutionary perspective that individuals should base their choices of whom to court on some estimation of their own attractiveness. For example, any tendency for a man to assess his likely position in a hierarchy would save him the time wasted in futile competition with those above his rank. Similarly, the tendency for a man to assess his own mate value and adjust mating aspirations accordingly would reduce the probability of mating with a woman whose attractiveness was substantially less than his own (and thus not getting a fair reproductive return on his own value). Analogous arguments can be made for women's choices of men. If a woman courts a man with a mate value substantially less than her own, she is not likely to maximize the number of successful offspring she could produce. Kenrick et al. (1993) suggested that if a woman were to court a man with overall value greater than hers, she would risk both loss of time and possible subsequent abandonment. Because female mammals have limited reproductive opportunities relative to males, it is important for females to attend to their own overall value, and they should be expected to base their choice of mate, in part, on that value.

Consistent with this evolutionary logic, there is considerable empirical evidence indicating that people with similar mate values tend to end up together (Buss, 1985; Kenrick et al., 1993; Gilbert et al., 1995; Kiesler and Baral, 1970; Lalumiere et al., 1995). What is the process through which this occurs? One possibility is that self-evaluations, based on levels of acceptance and rejection by actual and potential mates, guide individuals toward similar others. Leary et al. (1995) suggest that individuals require a system that responds when levels of rejection or exclusion by relevant others reaches some critical threshold. They argue that



self-esteem is a gauge (a sociometer) that monitors social exclusion; namely, people who characteristically feel included and accepted should have higher self-esteem than those who usually feel rejected.

## Self-Esteem Theory

### The Function of Self-Esteem

The self-esteem system is an evolved mechanism that monitors individuals' inclusionary status in social situations (Baumeister, 1993). Once alerted to potential exclusion, the self-esteem system guides behaviour toward re-establishing inclusionary status. Indeed, a great deal of human behaviour can be conceptualised as attempts to foster social ties and to minimize the possibility of falling into disfavour with others who are psychologically important (Baumeister and Leary, 2000). The function of self-esteem is to activate behavioural strategies to solve adaptive problems relating to social exclusion (Baumeister and Tice, 1990). Thus the self-esteem system is motivated to function as an evolutionary survival mechanism.

### The Self-Esteem Motive

People are motivated to preserve their self-esteem, thus maintaining positive feelings about themselves. According to Leary and Downs (1995) the self-esteem motive promotes positive affect, that is, people with low self-esteem experience negative emotion more intensely than people with high self-esteem. The self-esteem motive is also associated with goal achievement, however, self-promotion and goal achievement is only useful if accurate. Self-esteem is, according to Leary and Downs (1995) motivated by dominance, although it is more likely to be closely associated with acceptance than dominance. Motivations to maintain self-esteem tend to stem from behaviours that decrease the likelihood that they will be ignored avoided, or rejected. Most reactions to self-esteem threats appear to occur under conditions in which one's inclusionary status in important groups or relationships are in

jeopardy (Greenberg, Pyszczynski, Solomon, Pinel, Simon and Jordan, 1993; Burish and Houston, 1979; Bennett and Holmes, 1975).

### Social Inclusion

Self-esteem, one's notification of inclusionary or exclusionary status, is based on self-perceived feedback or appraisal from others. Feedback that connotes acceptance or rejection can be from anyone, significant or not, yet still have immense power to alter one's self-feelings. According to Krebs and Denton (1997), "People with positive self-regard seem to achieve better social relationships. They have higher regard for others generally. For example, people with high self-esteem are generally better liked by others than people with low self-esteem. (p.54)." Leary, Cottrell and Phillips (2001) stated that evidence supports the notion that individuals' feelings about themselves vary systematically as a function of even minor changes in other people's appraisals of them, and that events that lower self-esteem are those that people assume might lead others to reject them (Leary, Haupt, Strausser, & Chokel, 1998; Leary et al., 1995).

### Fluctuations in Self-Esteem

There is considerable theoretical and conceptual support for the notion that self-esteem can be temporarily altered, although the magnitude of such fluctuations does not appear to be large (Baumeister and Tice, 1985; McFarland and Ross, 1982; Baumeister, Tice and Hutton, 1989; Campbell, 1986; Leary et al., 1998; Leary et al., 1995). Fluctuations of self-esteem can be situation- and audience-specific, and identified by a change in state self-esteem. The present study focuses on how social exclusion can be manipulated to create a fluctuation in state self-esteem, and how this influences aspiration levels in selecting mates.

### Gender Differences

Gender differences in mate preferences, self-esteem and attractiveness have been well documented (Coomes and Kenkel, 1966; Udry and Eckland, 1984; Buss and Schmitt, 1993;

Regan, 1998; Wiederman and Dubois, 1998; Wade, 2000). Lalumiere et al. (1995) reported that males prefer females that are younger than themselves, and place more importance than females on characteristics associated with fertility, such as physical attractiveness.

Conversely, females prefer males who are older than themselves, and place more importance than males on characteristics associated with resource acquisition, such as industriousness, social dominance, and willingness to commit resources.

In a study conducted by Leary et al. (2001) looking at the effects of dominance and social acceptance on self-esteem, gender differences in self-esteem were found. This is consistent with previous research; males tend to score slightly higher on measures of overall self-esteem than females (Fleming & Courtney, 1984; Kling, Hyde, Showers, & Buswell, 1999). According to sexual strategies theory (Buss and Schmitt, 1993), men are more adaptively suited to short-term mating and women are more adaptively suited to long-term mating. It follows that, research in the area of mating aspirations and self-esteem should find gender differences. Coombs and Kenkel (1966) conducted a study where they looked at the sex difference in dating aspirations, using computer-selected partners at the target profiles. They found that there was a difference in the qualities that men and women identified as being important for short-term dating. Females it seems, are choosier than males. Although this study has no hypothesis regarding gender differences, we would expect to find gender differences consistent with previous research.

### Sociometer Theory

According to sociometer theory, self-esteem monitors levels of social inclusion and exclusion, thus performing an important social function. Leary et al. (1995) reported that the sociometer monitors the degree to which the individual is being included versus excluded by other people, and that motivates the person to behave in ways that minimizes the probability of rejection or exclusion. According to this view, the self-esteem system monitors the social

environment for cues indicative of relational devaluation (e.g., disinterest, dislike, exclusion, ostracism, rejection) and informs the individual by lowered self-esteem and negative affect when such cues are detected (Leary et al., 2001). Leary also proposed that the self-esteem system evolved as a sociometer that allows for preconscious monitoring of the social environment for cues connoting disapproval and rejection.

Sociometer theory of self-esteem is consistent with evolutionary theories of altruistic reciprocity. According to this theory, people have an innate need to belong and cooperate with each other. Indeed, a great deal of human behaviour can be conceptualised as attempts to foster social ties and to minimize the possibility of falling into disfavour with others who are psychologically important (Leary and Downs, 1995). State self-esteem is the cornerstone of this system, functioning as a gauge "that (1) monitors the social environment for cues indicating disapproval, rejection, or exclusion and (2) alerts the individual via negative affective reactions when such cues are detected" (Leary and Downs, 1995, p 129). To be effective in avoiding rejection and exclusion, such a system must monitor the social environment more or less continuously, yet not require attentional resources that are needed for other ongoing tasks. This explains why people are rarely aware of consciously monitoring their social environments but become quickly attuned to indications that others think negatively of them.

The sociometer model also explains why there are differences in how people respond to events that reflect on various domains of self-esteem. Motivation and self-esteem threats are often situation- and audience-specific. Kirkpatrick and Ellis (2001) suggest that instead of there being a global sociometer that tracks social inclusion in general, there are multiple sociometers that track social inclusion in different types of relationships. One of the sociometers proposed by Kirkpatrick and Ellis is a mating-specific sociometer, which is hypothesised to track acceptance and rejection by actual and potential mates. High mating-

specific sociometer readings would indicate relative high levels of sociosexual inclusion and self-perceived mate value; low mating-specific sociometer readings would indicate relatively low levels of sociosexual inclusion and self-perceived mate value.

### Social Exchange Model

The social exchange model (Kenrick et al, 1993) suggests that individuals seek the ‘best value’ they can achieve in a mate. According to this model, each individual is assumed to carry an approximate ‘market value’ depending on the degree to which he or she possesses valued traits such as beauty, intelligence, charm, wealth, and social status. It is assumed that if every individual seeks the best value in a mate, individuals of approximately equal value will end up together through the process of elimination.

Kenrick et al. (1993) posited that potential partners act on evolved cognitive-affective heuristics that lead them to seek and value mates with traits that would (in our ancestor’s time) have been related to (a) the likely possession of adaptive genes that might directly promote the survival of offspring and (b) the capacity and inclination to contribute tangible resources that could help the offspring survive.

### Specific Functional Model

The specific functional model proposed by Kirkpatrick and Ellis (2001) suggests that self-assessed mate value (relative to the perceived competition) provides important information for guiding partner preferences. Social comparisons between self and same-sexed others helps to form a concept of relative value or attractiveness. Self-evaluative information may also influence the way individuals react and interact in different social relationships (e.g. peer and family relationships). An important function of self-esteem is to guide individuals to approach social relationships that are of the highest quality possible, yet affordable given one’s own value.

Kirkpatrick and Ellis (2001) proposed that people possess not one, but several, sociometers, each one designed to monitor outcomes in a different kind of interpersonal relationship. Because different relationships require different qualities, they posited that, separate systems may have evolved to monitor one's standing in each specific kind of relationship, for example, a mating specific sociometer that tracks acceptance and rejection by opposite-sex others (Leary et al., 2001).

### Self-Perceived Mating Success

Sex differences in mate and relationship preferences are well established but little is known about the determinants of mating choices (Lalumiere et al, 1995). According to Buss (1999) there are individual differences in self-perceived mate value and self-esteem and these differences appear to be closely connected to the pursuit of short-term mating, however, these individual factors appear to affect males and females differently.

Self-perceived mating success may determine, in part, the compromise most people make between what they prefer in a romantic partner and what mating choices they actually make. Empirical evidence suggests that people typically wind up mating with partners who are similar to themselves, both in overall attractiveness (Feingold, 1988) and on a wide array of specific characteristics (Buss, 1985). Berschied, Dion, Walster and Walster (1971) reported that men's and women's minimal standards for attractiveness of a date were related to their own level of attractiveness. Similarly, Kenrick et al. (1993) and Regan (1998) showed that, when considering a casual sex partner, men and women emphasised and were unwilling to compromise on physical attractiveness. However, when considering a romantic partner, both emphasised and refused to compromise on interpersonal responsiveness. Lalumiere et al. (1995) found that self-perceived mating success was associated with preferences but not with actual choices; higher self-perceived mating success, however, was associated with more selective interests in both sexes.

### The Current Study

It is a supposition of the current model that there is a relationship between social exclusion and the level of aspiration in choosing potential mates, which is mediated by self-esteem. That is, individuals who have been socially rejected should tend to lower levels of aspirations in choosing mates, and this relation should be mediated by lowered mating self-esteem. Conversely, those who have been socially accepted should tend to raise levels of aspirations in choosing mates, and this relation should be mediated by raised mating self-esteem. Participants in the current study performed a number of tasks designed to investigate this mediational hypothesis. Participants were informed that they would be taking part in an impression formation study. The participants then performed two tasks; one involved participants taking part in an interview with three opposite-sex individuals over an intercom, then receiving feedback either indicating acceptance or rejection. The second task involved subjects rating (a) their state self-esteem and (b) how well-matched they felt they were to various members of the opposite sex (shown in profile form). Eighty participants were randomly assigned to either an accepted or rejected condition. Feedback from confederates in the study served as a self-esteem manipulation designed to alter participants mate aspiration levels.

The current research has practical consequences for the comprehension of the functions of self-esteem. Specifically, this research should increase our understanding of how inflated and/or deflated self-appraisals interact with social inclusion and exclusion to produce mate aspiration levels. This study will test the hypothesis that experiences of social exclusion will result in lowered aspiration levels in selecting mates, and that the relation will be mediated by lowered state self-esteem.

## Method

### Overview

The current research was designed to assess the causal relationship between social exclusion/inclusion from opposite sex others and aspiration levels as potential mates. In part one of the study, participants underwent a social inclusion/exclusion manipulation (acceptance vs. rejection by confederates), which was designed to alter the setting of their mating sociometer (i.e., one's perceived niche of acceptance and rejection by potential mates). Part two of the study involved the participants rating composite profiles and evaluating how well matched they were to them. This was designed to assess levels of aspiration in choosing potential mates. As outlined in the introduction, it was predicted that individuals that experienced social exclusion would have lowered aspiration levels when selecting potential mates, and that the relation would be mediated by lowered state self-esteem. Conversely, it was predicted that individuals who were socially accepted would have raised aspiration levels when selecting potential mates, and that the relation would be mediated by raised state self-esteem.

### Participants

Eighty male and female undergraduates (40 male, 40 female) were recruited from introductory psychology courses and halls of residences at the University of Canterbury. All participants were aged between 18 and 24 and indicated that they were heterosexual. All participants received payment of a \$5 lottery ticket each. Seventy-nine of the participants identified themselves as being European, one male participant identified himself as being South African.

Participants who had completed the pre-test questionnaire were telephoned closer to the time of running the experiment and were selected if they were not currently in a long-term dating or marital relationship. People in long-term dating or marital relationships were



excluded because questions about potential dating partners would have been less relevant to them.

## Procedure

### Phase One: Pre-Testing

All students attending stage 1 psychology lectures and labs initially responded to a short screening questionnaire. This questionnaire was an abbreviated version of the Resultant Self-esteem Scale (RSES; McFarland & Ross, 1982) that was adapted by Leary et al. (1995) as a measure of global state self-esteem to include twelve 7-point bipolar adjective scales that assessed how participants currently felt about themselves. The 12 bipolar adjectives, are as follows: good, competent, proud, adequate, useful, superior, smart, confident, valuable, important, effective, and satisfied, each paired with its opposite. Half of the items were reverse-scored (See Appendix A).

To compute pre-test global state self-esteem, items were first appropriately reverse-scored and then averaged. A reliability analysis was then conducted. One item (humble/proud) was removed at this point because it had a low item-total correlation indicating weak covariation with the other items constituting the scale. For the 80 students who participated in the current study, Cronbach's alpha for the pre-test measure of state self-esteem on 11 items was .85.

### Phase Two: Experimental Manipulation

Eighty undergraduate students, who had fulfilled the pre-test criteria, were recruited to take part in an impression formation study. Participants were informed that a Professor in the Psychology Department at the University of Canterbury had been employed by a commercial dating service as a consultant and that his job was to assess how potential clients use information to make decisions about whom they do and do not want to go on dates with.

Participants arrived at staggered intervals and were asked to wait in a room. Each participant was taken through to the first experimental room individually and told that they would be participating in two studies designed to look at the way impressions are formed of others in the context of selecting potential dating partners. The participants were told that their role in the first study was to be interviewed by three opposite sex participants (confederates posing as participants). Each participant was given an Information Sheet, which outlined the (bogus) rationale behind the study (See Appendix B). Participants were also asked to complete a Consent Form (See Appendix C) and a Demographics Questionnaire, which included items such as age, relationship length and sexual orientation (See Appendix D).

It was explained to the participants that, the first goal of study one was to examine the types of questions that people ask when evaluating others as potential dates. To accomplish this goal, participants were told that the participants (confederates) in the other room were going to make up two questions each and ask them over the intercom, therefore they would be responding to a total of 6 questions. The second goal was to examine how people use information provided by others to make dating decisions. To accomplish this goal, participants were told that the other participants (confederates) were going to be evaluating their answers to their questions.

As a cover story, participants were told that because ethics did not allow for the collection of information about others without them seeing it, they would be shown the evaluation forms completed by the confederates (this served as the acceptance/rejection manipulation). Forty participants were randomly assigned to be in the accepted group (20 male, 20 female) and 40 participants were randomly assigned to be in the rejected group (20 male, 20 female). Participants were told that they were free to skip any questions that they did not feel comfortable with and that they should try to answer each question as openly and

as honestly as they could. The experimenter stressed that, to maintain the privacy of everyone involved, the entire interview would be conducted over an intercom system and that s/he would never see or meet the interviewers.

After the experimenter had left the room, the three opposite sex confederates in the adjoining room each asked two predetermined questions, which were designed to be moderately disclosing so that the participant would reveal enough personal information to ostensibly make a personal appraisal. For example, one of the three confederates asked the participants to describe some aspects of themselves they liked best. The other questions included: What are your hobbies, now and in the past? What are you most afraid of? What is the activity you dislike doing the most? Describe some aspects of yourself you like least. What do you look for in a friend?

When the intercom interaction was complete, participants were told that the first study, assessing how potential clients of a dating service use information to make decisions about potential dating partners, was complete and that they were now going to take part in the second study, which involved evaluating possible profiles for a dating service. Participants were then thanked for their participation in the first study and told that the experimenter was going to collect the evaluation forms for their information.

The experimenter returned to the room with the evaluation forms completed by the confederates and left the room to allow the participants to read the evaluations on their own. Participants were rated ostensibly on their answers and whether or not the confederates would chose them as a dating partner. The participants were randomly assigned to receive feedback indicating that the interviewers either liked, accepted, and wanted to date them (inclusion condition) or that the interviewers did not particularly like, accept, and want the date them (exclusion condition). In both conditions, the three feedback sheets that participants received

contained ratings on a number of dimensions that connoted inclusion and exclusion (See Appendix E).

Specifically, the feedback sheets included ratings on a short series of items that indicated the level of interest in dating the participant. For example, one item assessed whether the interviewer would want to continue a conversation with the participant; another assessed whether the interviewer would want to introduce the participant to a friend. Feedback sheets included bogus answers from confederates indicating a: 'yes', 'unsure' or 'no' answer for each of the five questions. In the acceptance condition, participants received predominantly 'yes' responses with a few 'unsures'. In the rejection condition, participants received predominantly 'unsure' responses with a few 'no' answers (to minimise the aversiveness of the manipulation). Leary et al (1995) suggest that uncertain and ambivalent responses connote sufficient rejection for the purposes of this kind of study.

### Phase Three: Dependent Measures

Post-test state self-esteem. In phase two, participants were taken to another experimental room and asked to complete a dependent variable measure of global state self-esteem and inclusionary state self-esteem, which was a combination of adjectives derived for the Resultant Self-esteem Scale (the same one that was completed as a pre-test prior to the experiment) and adjectives which connote social inclusion. Combinations of 11 bipolar adjectives were used in the adapted version of the global Resultant Self-Esteem Scale (McFarland and Ross, 1982) and four adjectives, which connoted social inclusion and specifically assessed feelings of acceptance/rejection, were used in the inclusionary state self-esteem scale. The four inclusionary items were: liked/disliked, popular/unpopular, socially attractive/socially unattractive, accepted/rejected (See Appendix F).

Reliability analyses were conducted on the two different indices of post-test state self-esteem. One analysis matched the 11 items from the pre-test. Cronbach's alpha for the post-

test measure of global state self-esteem was .87. One analysis was conducted that specifically assessed the 4 items of social inclusion/exclusion. One item (desirable/undesirable) was removed at this point because it had a low item-total correlation indicating weak covariation with the other items constituting the scale. Cronbach's alpha for the 4-item post-test measure of inclusionary self-esteem was .85. The correlation between state self-esteem and inclusionary self-esteem was  $0.79^{**}$  ( $p < 0.01$ ). Cronbach's alpha for the post-test measure of state self-esteem (15 items) was .91.

Mate aspiration levels. Participants were then informed that they would be reviewing photos and self-descriptions of nine opposite-sex individuals who are potential clients of the dating agency. The participants were seated in front of a computer with profiles and rating scales on it. The profiles depicted opposite-sex individuals of high, moderate, or low mate value (social/physical attractiveness), as indicated by the social information and accompanying photograph. Social and physical attractiveness were covaried so as to produce profiles that systematically varied in overall mate value. After perusing and evaluating nine profiles (three profiles at each of three levels of attractiveness) participants answered questions designed to assess how well matched they felt they were to each profile (See Appendix G).

Construction of stimulus profiles: Personality descriptions. The descriptions were composed of bogus personality scores on a handful of personality scales. Personal descriptive information was based on Kenrick, Neuberg, Zierk and Krones (1994), and varied systematically on socially desirable traits such as social visibility and even temperedness. Descriptions also included some filler information such as neutral personality traits, which varied slightly and randomly between the descriptions. Each personality score was presented in the descriptions both as a percentile score and as a point on a continuum (See Appendix H).

The descriptions were pre-rated by 10 (5 male and 5 female) psychology students who were not participants in the experiment. The personality descriptions were rated on a scale from 1 (not at all socially attractive) to 10 (extremely socially attractive) (see Appendix I). From the personality description pre-rating procedure, three personality descriptions with a mean rating of 8.43 ( $SD = 0.47$ ) were selected for the high socially attractive conditions. Three personality descriptions with a mean rating of 5.33 ( $SD = .97$ ), were selected for the moderately socially attractive conditions. Three personality descriptions with a mean 2.70 ( $SD = 1.10$ ), were selected for the low socially attractive conditions. A total of nine personality descriptions were used in the experiment.

Construction of stimulus profiles: Photographs. Thirty photographs (15 male and 15 female) were used in the pre-rating procedure. The photographs for each condition (high, moderate and low physical attractiveness) were of females and males obtained from Web Pages from Australian Universities, modelling agencies and photography companies. Stimulus photographs were pre-rated by 6 (3 male and 3 female) psychology students who were not participants in the experiment. The photographs were rated on a scale from 1 (not at all physically attractive) to 10 (extremely physically attractive) (See Appendix J).

From the photograph pre-rating procedure, three female photographs with a mean rating of 7.83 ( $SD = 1.46$ ), and three male photographs with a mean rating of 7.61 ( $SD = 1.64$ ), were selected for the high physically attractive conditions. Three female photographs with a mean rating of 4.77 ( $SD = 1.15$ ), and three male photographs with a mean rating of 4.77 ( $SD = 1.24$ ), were selected for the moderately physically attractive conditions. Three female photographs with a mean of 2.94 ( $SD = 0.61$ ), and three male photographs with a mean rating of 2.00 ( $SD = 1.1.$ ), were selected for the low physically attractive conditions. A total of 18 colour headshot photographs (300/420 pixel) were chosen from the pre-rating procedure and used in the study.

Construction of complete profiles viewed by participants. The eighteen (9 male and 9 female) pre-rated photographs and nine pre-rated personality descriptions were combined to create new composite profiles. The three high attractiveness photographs were paired with high socially attractive descriptions, three medium attractiveness photos were paired with medium socially attractive descriptions, and three low attractiveness photos were paired with low socially attractive descriptions. This procedure created the 18 profiles varying in overall attractiveness that were used in this experiment. Each male participant viewed 9 female profiles and each female participant viewed 9 male profiles.

Mate aspiration ratings. The researcher, in collaboration with a programmer in the Psychology Department at the University of Canterbury, designed the computer programme. The participants viewed a screen that included each photograph and personality description then clicked on a button to take them to the next screen. The five questions that followed were designed to assess how well matched the participants thought they were to the different target profiles; questions were rated on a 7-point scale. The rating scale consisted of a short series of questions (see Appendix G). For example, realistically, does this seem like the kind of person you would form a dating relationship with? How well matched are you to this person? How comfortable do you think you would be dating this person?

Reliability analyses were conducted to investigate whether the five ratings of each profile could be combined into composite measures. For each of the 18 profiles, the alpha reliability coefficients for the five items exceeded .88, with consistently high item-total correlations, indicating strong internal consistency in the way in which the five items were responded to by the participants. The five items were thus averaged to create composite measures of mate-compatibility for each of the 18 profiles.

Next, reliability analyses were conducted to examine whether these composites could be combined within attractiveness categories. Results indicated that female ratings of the

three high attractiveness male profiles achieved Cronbach's alpha of .82. Male ratings of the three high attractiveness female profiles achieved Cronbach's alpha of .89. These ratings were thus averaged to form a composite measure of perceived mate compatibility with the high attractiveness targets. To the extent that individuals rated themselves as more compatible with the high attractiveness profiles, individuals were considered to have higher mate aspirations.

For the ratings of the moderate attractiveness profiles, the female participants reached Cronbach's alpha of .47. Upon further investigation, analyses showed that one of the profiles comprising the moderate attractiveness category for male profiles had a low item-total correlation ( $r = .13$ ), indicating that it did not correlate strongly with the other profiles composing the attractiveness category. The profile was therefore excluded from the analysis. After omitting this profile, Cronbach's alpha for the remaining two profiles in the category was .65.

For the ratings of the moderate attractiveness profiles, the male participants reached Cronbach's alpha of .56. Again, analyses showed that one of the profiles composing the medium attractiveness category for male ratings of medium attractiveness female profiles had a low item-total correlation ( $r = .24$ ). It was therefore excluded from the analysis. After omitting this profile, Cronbach's alpha for ratings of the medium attractiveness female profiles reached .65. The two female ratings and the two male ratings were thus averaged to form composite measures of perceived mate compatibility with the moderate attractiveness targets.

Ratings of the low attractiveness profiles reached Cronbach's alpha of .76 for the female participants and .77 for the male participants. The three female ratings and three male ratings were thus averaged to form composite measures of perceived mate compatibility with the low attractiveness targets. To the extent that individuals rated themselves as more



compatible with the low attractiveness profiles, individuals were considered to have lower mate aspirations.

The mate-compatibility measures were used to assess mate aspiration levels. To the extent that individuals rated themselves as more compatible with the highly attractive profiles, they were scored as having higher mate aspirations. Conversely, to the extent that individuals rated themselves as more compatible with the unattractive profiles, they were scored as having lower mate aspirations. The ratings of the moderately attractive profiles were not considered to be diagnostic of aspiration levels in selecting mates.

#### Phase Four: Manipulation Checks and Debriefing

The experimenter then administered a manipulation check to ensure the self-esteem manipulation was effective. Specifically, participants were given an evaluation form that asked three questions about how they felt about the feedback they received. (a) Overall, how positively was your information regarded? (b) Overall, how accepting were the other people of you? (c) Did you believe that the other people were the ones who completed those ratings that you received? (See Appendix K).

Participants were then probed for suspicion using a funnel type interview (based on McFarland and Ross, 1982). The experimenter informed participants that it would be helpful in terms of improving the experiment if they answered some more questions. Firstly, they were asked some general questions about the experiment such as whether they found anything odd or confusing. They were then asked if they thought the two tasks completed were related in any way and if so, how. If the participants showed no suspicion regarding the deception involved in the study and reported that they thought the two studies were independent of each other, the suspicion probe questions were finished and the debriefing began.

If the experimenter was suspicious at all, further questions were asked. For example, did they think there may have been any other purposes to the experiment, did they think there was any other purpose for having them fill out the questionnaires, and whether they thought we were trying to make them feel a certain way. Whether they thought that the reason for obtaining the ratings were to obtain their reactions to the first study and whether they recognised that the pre test was the same as the items used in any other questionnaires. The experimenter also asked if they had heard anything about the study before they came in to participate.

Participants were then debriefed regarding rationale and deceptions of the study, given instructions not to discuss the contents of the study with anyone, and dismissed.

## Results

### Manipulation Check

Three questions were asked to determine whether the manipulation was successful. First, participants rated how positively their information was regarded on a bipolar scale from 1(not at all positively) to 7(extremely positively). The accepted group had a mean of 6.13 ( $SD = 0.65$ ; range: 5 to 7) and the rejected group had a mean of 2.52 ( $SD = 0.75$ ; range: 1 to 4). Thus, there was no overlap in responses between the two groups. As expected, participants in the social inclusion condition reported that they were regarded more positively than the participants in the social exclusion condition.

Second, participants rated how accepting the others were of them on a scale from 1(not at all accepting) to 7(very accepting). The accepted group had a mean of 6.22 ( $SD = 0.62$ ; range: 5 to 7) and the rejected group a mean of 2.73 ( $SD = 0.88$ ; range: 1 to 5). Although there was some overlap between participants in the accepted and rejected conditions on this

question, overall the participants in the accepted condition clearly rated themselves as more accepted.

Finally, participants were asked whether they believed that the other people were the ones who completed the ratings that they received. All but two of the 80 participants reported that they believed the feedback. Analyses conducted with and without these two participants did not produce different findings.

### Self-Feelings

To test the prediction that individuals who were socially excluded would experience reduced state self-esteem, whereas individuals who were socially included would experience increased state self-esteem, the following analyses were conducted.

First, to examine whether the random assignment was successful, participants in the social inclusion and exclusion conditions were compared on pre-test state self-esteem (See Appendix A). The mean for all accepted participants was 5.14 ( $SD = 0.60$ ) and for all rejected participants was 5.08 ( $SD = 0.84$ ),  $t(1, 79) = .36$ ,  $p = .72$ . Given that these groups did not differ significantly, the random assignment appeared to have been successful.

Next, to examine how social inclusion and exclusion resulted in changes to post-test global state self-esteem, pre-test and post-test scores for global state self-esteem for participants in the accepted and rejected conditions were compared. The means for all accepted participants on the pre-test were,  $M = 5.14$  and  $M = 5.17$  on the post-test,  $t = .36$ ,  $p = .72$ . The means for all rejected participants on the pre-test were  $M = 5.08$  and  $M = 4.72$  on the post-test,  $t = -3.09$ ,  $p = .004$ . Thus exclusion had a stronger effect in lowering participants' post-test global state self-esteem than inclusion had in raising participants' post-test global state self-esteem.

Then, a 2 X 2 (Manipulation [Inclusion-Exclusion] X Gender) analysis of variance (ANOVA) was performed on participants' self-ratings for the 11-item post-test measure of

global state self-esteem. The matching pre-test global state self-esteem measure was included as a covariate in the analyses. The following reported means are adjusted for this covariate.<sup>1</sup> The results revealed a significant main effect for manipulation. Specifically, the accepted group ( $\underline{M} = 5.15$ ) reported higher mean levels of post-test global state self-esteem than did the rejected group ( $\underline{M} = 4.74$ ),  $\underline{F}(1, 79) = 12.05$ ,  $p < .001$ . Although there was not a significant main effect for gender (males:  $\underline{M} = 5.01$ ; females:  $\underline{M} = 4.88$ ;  $\underline{F}(1, 79) = 1.14$   $p = .29$ ), there was a significant gender x manipulation interaction,  $\underline{F}(1, 79) = 5.47$ ,  $p = .02$ . Specifically, the pattern of data suggests that this effect was attributable to the effects of gender on manipulation. An examination of adjusted means for global state self-esteem revealed females (accepted:  $\underline{M} = 5.23$ ; rejected:  $\underline{M} = 4.53$ ), more than males (accepted:  $\underline{M} = 5.07$ ; rejected:  $\underline{M} = 4.95$ ), were influenced by the manipulation.

Finally, a 2 X 2 (Manipulation [Inclusion-Exclusion] X Gender) analysis of variance (ANOVA) was performed on the 4-item post-test state self-esteem measure specifically in the domain of inclusion/exclusion (referred to here as inclusionary state self-esteem). Again, the pre-test global state self-esteem measure was included as a covariate in the analyses. The following reported means are adjusted for this covariate.<sup>2</sup> The results revealed a significant main effect for manipulation: the accepted group ( $\underline{M} = 5.22$ ) reported higher mean levels of post-test inclusionary state self-esteem than did the rejected group ( $\underline{M} = 4.45$ ),  $\underline{F}(1, 79) = 18.15$ ,  $p < .000$ . There was neither a significant main effect for gender (males:  $\underline{M} = 4.88$ ; females:  $\underline{M} = 4.79$ ;  $\underline{F}(1, 79) = .25$   $p = .62$ ) nor a significant gender x manipulation interaction,  $\underline{F}(1, 79) = 2.53$ ,  $p = .12$ . An examination of the adjusted means for all participants on the 4-

---

<sup>1</sup> The adjusted means differed little from the unadjusted means. Specifically, for the 11 item measure, the unadjusted means were as follow: Males ( $M = 5.02$ ,  $SD = .71$ ), females ( $M = 4.87$ ,  $SD = .67$ ), accepted group ( $M = 5.17$ ,  $SD = .49$ ), and rejected group ( $M = 4.72$ ,  $SD = .78$ ).

<sup>2</sup> The adjusted means differed little from the unadjusted means. Specifically, for the 4 item measure, the unadjusted means were as follow: Males ( $M = 4.89$ ,  $SD = .99$ ), females ( $M = 4.78$ ,  $SD = .92$ ), accepted group ( $M = 5.23$ ,  $SD = .59$ ), and rejected group ( $M = 4.43$ ,  $SD = 1.08$ ).

item post-test state self-esteem measure revealed that, although the interaction effect was not significant, the gender x manipulation interaction was in the same direction as the significant interaction reported above. Specifically, females' post-test inclusionary state self-esteem (accepted:  $\underline{M} = 5.32$ ; rejected:  $\underline{M} = 4.25$ ) was more affected by the manipulation than males' post-test inclusionary state self-esteem (accepted:  $\underline{M} = 5.11$ ; rejected:  $\underline{M} = 4.64$ ).

Overall, these results suggest that the manipulation was successful in changing global state self-esteem, that it was even more successful in changing inclusionary state self-esteem, and that the effect was stronger on females than on males.

### Mate Aspiration Levels

Analyses were conducted to test the following predictions: (1) participants in the accepted condition, more than participants in the rejected condition, would report feeling compatible with the highly attractive target profiles. Conversely, (2) participants in the rejected condition, more than participants in the accepted condition, would report feeling compatible with the unattractive target profiles. Participants in the accepted and rejected conditions were not expected to differ, however, in their feelings of compatibility with the moderately attractive target profiles.

First, a 2 X 2 (Manipulation [Inclusion-Exclusion] X Gender) analysis of variance (ANOVA) was performed on the composite measure of participants' ratings of compatibility with the highly attractive target profiles. Again, the pre-test state self-esteem measure was included as a covariate in the analyses. The following reported means are adjusted for this covariate.<sup>3</sup> The results revealed a significant main effect for manipulation. Specifically, as predicted, the accepted group ( $\underline{M} = 4.54$ ) reported feeling more compatible with the highly attractive target profiles than did the rejected group ( $\underline{M} = 3.94$ ),  $F(1, 79) = 6.70$ ,  $p = .01$ .

---

<sup>3</sup> The adjusted means differed little from the unadjusted means. Specifically, for all high attractiveness profile composites, the unadjusted means were as follow: Males ( $M = 4.24$ ,  $SD = 1.22$ ), females ( $M = 4.24$ ,  $SD = 1.08$ ), accepted group ( $M = 4.56$ ,  $SD = 1.07$ ), and rejected group ( $M = 3.92$ ,  $SD = 1.15$ ).

There was neither a significant main effect for gender (males:  $\underline{M} = 4.23$ ; females:  $\underline{M} = 4.25$ ;  $\underline{F}(1, 79) = .01$ ,  $p = .92$ ) nor a significant gender x manipulation interaction,  $\underline{F}(1, 79) = .12$ ,  $p = .73$ .

Second, a 2 X 2 (Manipulation [Inclusion-Exclusion] X Gender) analysis of variance (ANOVA) was performed on the composite measure of participants' ratings of compatibility with the moderately attractive target profiles. Again, the pre-test state self-esteem measure was included as a covariate in the analyses. The following reported means are adjusted for this covariate.<sup>4</sup> The accepted group ( $\underline{M} = 3.72$ ) reported only slightly higher mean ratings of compatibility to the medium overall attractiveness profiles than the rejected group ( $\underline{M} = 3.58$ ),  $\underline{F}(1, 79) = .62$ ,  $p = .43$ . Further, there was neither a significant main effect for gender (males:  $\underline{M} = 3.69$ ; females:  $\underline{M} = 3.60$ ;  $\underline{F}(1, 79) = .22$ ,  $p = .64$ ) nor a significant gender x manipulation interaction,  $\underline{F}(1, 79) = .165$ ,  $p = .20$ .

Finally, A 2 X 2 (Manipulation [Inclusion-Exclusion] X Gender) analysis of variance (ANOVA) was performed on the composite measure of participants' ratings of compatibility with the unattractive target profiles. Again, the pre-test state self-esteem measure was included as a covariate in the analyses. The following reported means are adjusted for this covariate.<sup>5</sup> The results revealed a significant main effect for manipulation. Specifically, as predicted, the rejected group ( $\underline{M} = 2.50$ ) reported feeling more compatible with the unattractive target profiles than did the accepted group ( $\underline{M} = 2.12$ ),  $\underline{F}(1, 79) = 4.95$ ,  $p = .03$ . There was neither a significant main effect for gender (males:  $\underline{M} = 2.44$ ; females:  $\underline{M} = 2.19$ ;

---

<sup>4</sup> The adjusted means differed little from the unadjusted means. Specifically, for all medium attractiveness profile composites, the unadjusted means were as follow: Males ( $M = 3.69$ ,  $SD = .85$ ), females ( $M = 3.61$ ,  $SD = .72$ ), accepted group ( $M = 3.72$ ,  $SD = .79$ ), and rejected group ( $M = 3.58$ ,  $SD = .78$ ).

<sup>5</sup> The adjusted means differed little from the unadjusted means. Specifically, for all low attractiveness profile composites, the unadjusted means were as follow: Males ( $M = 2.43$ ,  $SD = .88$ ), females ( $M = 2.20$ ,  $SD = .68$ ), accepted group ( $M = 2.12$ ,  $SD = .66$ ), and rejected group ( $M = 2.51$ ,  $SD = .87$ ).

$F[1, 79] = 2.1, p = .15$ ) nor a significant gender x manipulation interaction,  $F(1, 79) = .21, p = .65$ .

In summary it can be said that manipulation of state self-esteem in this study was effective and that the aspiration levels of socially included and excluded participants were influenced significantly in the expected directions. The socially evaluative feedback from the opposite-sex confederates influenced participants' aspiration levels in selecting potential mates. Participants in the socially excluded condition rated themselves as more well matched to the lower socially attractive profiles than participants in the socially included condition. Conversely, overall, participants rated themselves as more well matched to the more attractive profiles.

### Mediational Analyses

The following multiple regression analyses were conducted to test the hypothesis that state self-esteem mediates the relation between social inclusion/exclusion and aspiration levels in selecting mates. Pre-test state self-esteem was controlled for (entered on the first step) in all analyses. The 4-item inclusionary post-test state self-esteem measure (rather than the 11-item global state self-esteem measure) was employed as the mediator because it was most theoretically relevant for testing the hypothesis. Social inclusion/exclusion was coded as a dummy variable.

We first examined whether state self-esteem mediated the relation between social inclusion/exclusion (the independent variable) and ratings of compatibility with the highly attractive target profiles (the dependent variable). According to Baron and Kenny (1986) and Holmbeck (1997), in order to complete the requirements for mediation, the following conditions need to be satisfied. Firstly the independent variable must be significantly associated with the hypothesized mediator (in the currently study:  $\beta = .41, t[1,79] = 4.26, p < .000$ ). The second requirement is for the independent variable to be significantly

associated with the dependent variable (in the current study:  $\beta = .26$ ,  $t[1,79] = 2.63$ ,  $p = .01$ ). Thirdly, the mediator must be significantly associated with the dependent variable (in the current study:  $\beta = .23$ ,  $t[1, 79] = 2.11$ ,  $p = .04$ ). Finally, the impact of the independent variable on the dependent measure must be reduced after controlling for the mediator (in the current study, this path was reduced from .26 to .21 and was no longer statistically significant,  $t[1, 79] = 1.88$ ,  $p = .06$ ). These results provide some support for the hypothesis that heightened levels of inclusionary state self-esteem mediate the relation between social inclusion and increased aspiration levels in selecting mates. The relation between social inclusion/exclusion and subsequent ratings of compatibility with the highly attractive target profiles (i.e., high aspiration levels) was partially mediated by post-test state self-esteem.

Next, we examined whether state self-esteem mediated the relation between social inclusion/exclusion (the independent variable) and ratings of compatibility with the unattractive target profiles (the dependent variable). First, the independent variable was significantly associated with the mediator variable,  $\beta = .41$ ,  $t(1,79) = 4.26$ ,  $p < .000$ . Second, the independent variable was significantly associated with the dependent measure,  $\beta = -.24$ ,  $t(1,79) = -2.22$ ,  $p = .03$ . Thirdly, however, the mediator was not significantly associated with the dependent variable ( $\beta = -.19$ ,  $t[1, 79] = -1.64$ ,  $p = .11$ ), although the relation was in the expected direction. Finally, the impact of the independent variable on the dependent variable was somewhat reduced after controlling for the mediator (specifically, this path was reduced from -.24 to -.20 and was no longer statistically significant,  $t[1, 79] = -1.65$ ,  $p = .10$ ). These results provide mixed support for the hypothesis that lowered inclusionary state self-esteem mediates the relation between social rejection and lowered aspiration levels in selecting mates.



## Discussion

The goal of the current research was to test the hypothesis that experiences of social inclusion/exclusion will affect aspiration levels in selecting mates, and that this influence will be mediated by state self-esteem. That is, the current research sought to examine an important factor that may influence levels of self-esteem and how variations in self-esteem calibrate aspirations levels in selecting mates. Thus, in a larger sense, this thesis sought to shed light on what self-esteem is and what it does.

Initial results from this study provide qualified support for the hypothesis that experiences of social inclusion/exclusion by the opposite sex influence levels of self-esteem and alter aspiration levels in selecting potential mates. The study found that participants that had received rejecting feedback from opposite-sex others were more likely to rate themselves as well matched to the unattractive target profiles, suggesting that their mate aspiration levels were lowered. Conversely, participants that had received accepting feedback from opposite-sex others were more likely to rate themselves as well matched to the attractive target profiles, suggesting that their mate aspiration levels were raised. However, the prediction that post-test state self-esteem would mediate the relation between acceptance-rejection and aspiration levels in selecting mates was only partially supported, suggesting that a mechanism other than state self-esteem may be implicated as a mediating mechanism.

As expected the manipulation was successful, accepted participants scored higher than the rejected participants on questions vis-à-vis perceived inclusion and positive regard. Those who were accepted subsequently felt more positively about themselves than did those who were excluded.

The current study used a post-test measure of state self-esteem, which incorporated global state self-esteem (11-item measure) and inclusionary state self-esteem (4-item measure), to assess participants' self-feelings in relation to positive and negative social

feedback from opposite-sex others. The results of the analysis conducted on the 11-item measure of post-test global state self-esteem revealed a significant main effect for manipulation, which was consistent with the research hypothesis; those who received negative feedback would report lower mean scores of state self-esteem than those who received positive feedback. Although, there was no main effect for gender, there was a significant interaction effect of gender and manipulation, which suggests that gender may have an influence on manipulation for the post-test global state self-esteem measure. Specifically, the results from the analysis conducted on the 11-item measure of post-test global state self-esteem revealed that female participants reported higher mean ratings of post-test global state self-esteem than male participants. Analyses carried out on the 4-item post-test inclusionary state self-esteem measure found a significant main effect for manipulation. There was neither a significant main effect for gender nor a significant interaction effect of gender and manipulation; however, the interaction was in the same direction as the 11-item measure. These findings suggest that manipulation was successful in changing both global and inclusionary state self-esteem, especially in females.

As stated previously negative feedback can be more effective in altering state self-esteem than positive feedback (Leary et al., 1995); thus, there appears to be an asymmetrical dimension to positive and negative feedback. In the current study, exclusion had a notably stronger effect in lowering participants' post-test global state self-esteem than inclusion had in raising participants' post-test global state self-esteem. This interpretation is consistent with other research findings. For example, Leary and his colleagues investigated the effects of social acceptance on self-esteem (Leary et al, 1995,1998); they found that those who thought a group had excluded them rated themselves more negatively than those who thought they had been selected for the group rated themselves positively. The results of the current study revealed that those in the excluded condition reported a greater change in post-test

inclusionary state self-esteem following the manipulation (negative feedback), than those in the included condition. Specifically, there was a greater shift from pre-test self-esteem levels in reported self-feelings from those who had received negative feedback than from those who had received positive feedback (almost an entire point difference). This is consistent with findings reported by Leary et al. (1998), who found that a single negative reaction could counteract past positive reactions. Which, in turn supports the notion of sociometer theory; i.e., that our psychological systems are geared to detect and react to exclusionary cues in our social environment.

The results supported the hypothesis that, participants in the rejected condition, more than participants in the accepted condition, would report being compatible with the unattractive target profiles. Thus, mate aspiration levels were successfully lowered by negative social feedback from opposite-sex others; i.e., participants' mate-choice behaviour was successfully altered by the manipulation of their state self-esteem. The manipulation of state self-esteem in this study was effective and the aspiration levels of socially included and excluded participants were influenced significantly in the expected directions. The socially evaluative feedback from the opposite-sex confederates influenced participants' aspiration levels in selecting potential mates. Additionally, there was a general trend for participants to rate themselves as more well matched to the higher socially attractive profiles, than the lower socially attractive profiles.

The results suggest that the manipulation was successful in changing post-test global state self-esteem, post-test inclusionary state self-esteem, and that this effect was stronger on females than on males. The gender differences found in this study are consistent with evolutionary-based theories regarding mate selection (Buss, 1999; Gangstad & Simpson, 2000; Symons, 1979). For example, Leary et al. (1995) found that on a scale of state self-esteem, females who had been socially excluded rated themselves less positively than males

who had been socially excluded. Interestingly, there was no significant effect of gender on mate aspiration levels, suggesting that, although females were more affected by the manipulation of their state self-esteem than males, when it came to rating themselves against target profiles of varying attractiveness, males and females reacted similarly. It would seem that opposite-sex rejection influences males in much the same way as females in terms of setting aspiration levels.

A further objective of the current study was to test the mediational hypothesis that state self-esteem mediates the relation between social inclusion/exclusion and aspiration levels in selecting mates. The results provided mixed support for the hypothesis. An examination of the low attractiveness target profiles revealed that variations in post-test inclusionary state self-esteem partially mediated the relation between social rejection and lowered aspiration levels in selecting mates. Similar results were found when high attractiveness target profiles were examined; variations in post-test inclusionary state self-esteem partially mediated the relation between social inclusion and subsequent ratings of compatibility with highly attractive target profiles.

Mate aspiration levels in the current study were not mediated fully by state self-esteem. The reason for this could be that the measure used in the study was not an effective measure of state self-esteem. Alternatively the explanation could be that state self-esteem is not the mechanism through which social rejection influences aspiration levels. A study by Bennison (2002) on friendship aspirations found that despite substantial decrements in self-esteem following rejection, there was no evidence of changes in aspiration levels in choosing friends. Thus, results suggested that mood does not fully account for the effect found.

If, as was proposed by Leary et al. (1995), the response to negative feedback on inclusionary status is stronger than for positive feedback, this gives weight to an evolutionary argument for evolved mechanisms to avoid exclusion. Sociometer theory posits that, it is

serving a purpose by alerting the individual to potential rejection or perceived acceptance and moderating behaviour accordingly. This study was not trying to prove that inclusion was stronger than exclusion or visa versa, rather that, given negative or positive feedback from opposite sex others, individuals will modify their mate aspiration levels. This idea provides support for the assumption that lowering individuals' state self-esteem has the potential to change choice-making behaviours i.e. altering ones' aspiration levels a potential mate.

Although the results of this study are relevant to evaluating sociometer theory, the findings mainly provide support for the specific functional model proposed by Kirkpatrick and Ellis (2001). They suggest that a number of different sociometers serving a variety of functions may have evolved to monitor individual inclusionary status in specific relationships, for example, a mating specific sociometer that tracks acceptance and rejection by the opposite sex. The participants in the current study adjusted their mate aspirations following socially evaluative feedback designed to connote acceptance and rejection, thus, giving weight to the premise that self-assessed mate value, relative to the perceived competition, provides important information for guiding mate aspiration levels.

Because participants in this study altered their choice-making behaviour following socially evaluative feedback from opposite-sex others, this suggests that self-esteem functions to guide aspiration levels in selecting potential mates. These findings directly support the specific functional model proposed by Kirkpatrick and Ellis (2001), that the relation between social acceptance-rejection and aspiration levels in selecting mates, is mediated (in this case partially mediated) by state self-esteem. The practical implications of this finding go to all aspects of life, not just opposite-sex mating aspirations, but possibly other social relationships, for example, same-sex friendship aspirations and same-sex mating aspirations.

Research currently being carried out at the University of Canterbury will further examine the specific-functional model hypothesis, investigating state self-esteem and aspiration levels in same-sex friendships. These studies expect to find similar results as have been found in the current study. Further research in the area of same-sex mate aspirations and opposite-sex friendship aspirations, will continue to test the theory that experiences of social exclusion will result in lowered aspiration levels, and that relation will be mediated by state self-esteem. Specifically, further research will increase current knowledge of how increased and/or decreased self-appraisal interacts with rejection or acceptance from others to influence aspiration levels, in all interpersonal relationships.

Specific limitations of the present research suggest important directions for future research. First, the outcome variables used in the present study -- state self-esteem and mating aspirations -- were based exclusively on self-reports. Further studies in this area could use different report methods for conducting this research (e.g., peer-reports). Second, the results of the research can be attributed only to white, middle-class, single, university students. The current findings need to be replicated on other samples that differ in age, culture and socio-economic status. Third, even though social feedback (inclusion/exclusion) predicted mate aspiration levels, the present research just begins to examine these findings.

The characteristics of the target profiles participants were exposed to, could be presented as another possible limitation of the study. When making mating decisions do we have all that information available to us or are we making the initial decision based purely on aesthetics? The combination of high attractiveness photographs and high social attractiveness personality profiles created target profiles that were extremely attractive (low profiles that were extremely unattractive). Gutierrez et al. (1999) suggested that in every day life we are not usually exposed to numerous others who are highly attractive. Being privy to such a large amount of personal information on initial meetings is not usual either. This

study could be improved by providing a forum for running this study that involved a true reality based setting. The subsequent ecological validity created would provide an environment in which 'real' manipulation of state self-esteem could be examined and the resultant mate aspiration levels investigated.

The functional model proposed by Kirkpatrick and Ellis (2001) supports, current theories based in evolutionary psychology and recent issues in self-esteem literature. This thesis offers an extension of those theories and literature and attempted to demonstrate that social exclusion from opposite-sex others has the potential to lower mate aspiration levels. This study was successful in, not only manipulating state self-esteem, but also changing the aspiration levels of the participants. These findings suggest important implications for future research associated with aspiration levels. As well as being useful in the construction of further scales designed to assess state self-esteem, the findings enable further studies to examine the functionality of state self-esteem and aspiration levels. Further research in this area is likely to find that there are many more sociometers that serve varying specific functions. This is an exciting foundation from which to develop new hypotheses about the consequences of varying levels of self-esteem as a function of choice-making behaviour.

## References

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. Journal of Personality and Social Psychology, *51*, 1173-1182.

Baumeister, R. F. (Ed.). (1993). Self-Esteem: The puzzle of low self-regard. New York: Plenum.

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. Psychological Bulletin, *117*, 497-529.

Baumeister, R. F., & Tice, D. M. (1990). Anxiety and social exclusion. Journal of Social and Clinical Psychology, *9* (2), 165-195.

Baumeister, R. F., Tice, D. M., & Hutton, D. G. (1989). Self-presentational motivation and personality differences in self-esteem. Journal of Personality, *57* (3), 547-579.

Bennett, D. H., & Holmes, D. S. (1975). Influences of denial (situational redefinition) and projection on anxiety associated with threat to self-esteem. Journal of Personality and Social Psychology, *32*, 915-921.



Bennison, T. E. (2002). Relations between social exclusion, state self-esteem, and aspiration levels in the selection of potential same-sex friends. Thesis submitted in partial fulfilment of a Master's of Arts degree, University of Canterbury, Christchurch, New Zealand.

Berschied, E., Dion, K., Walster, E., & Walster, G. W. (1971). Physical attractiveness and dating choice: A test of the matching hypothesis. Journal of Experimental Social Psychology, 1, 173-189.

Burish, T. G., & Houston, B. K. (1979). Causal projection, similarity projection, and coping with threat to self-esteem. Journal of Personality, 47, 57-70.

Buss, D.M. (1999). Evolutionary Psychology: The New Science of the Mind. Boston: Allyn & Bacon.

Buss, D. M. (1985). Human mate selection. American Scientist, 73, 47-51.

Buss, D. M., & Schmitt, K. P. (1993). Sexual strategies theory: An evolutionary perspective on human mating. Psychological Review, 100, 204-232.

Campbell, J. D. (1986). Similarity and uniqueness: The effects of attribute type, relevance, and individual differences in self-esteem and depression. Journal of Personality and Social Psychology, 50, 281-294.

Coomes, R.H., & Kenkel, W. F. (1966). Sex differences in dating aspirations and satisfaction with computer-selected partner. Journal of Marriage and the Family, 28: 62-66.

Cosmides, L., & Tooby, J. (2000). Evolutionary Psychology: A Primer. (In press).

Ellis, B. J., & Simpson, J. A., & Campbell, L. (in press). Trait-Specific Dependence in Romantic Relationships. Journal of Personality.

Feingold, A. (1988). Matching for attractiveness in romantic partners and same-sex friends: A meta-analysis and theoretical critique. Psychological Bulletin, 104, 226-235.

Fleming, J. S., & Courtney, B. E. (1984). The dimensionality of self-esteem: II. Hierarchical facet model for revised measurement scales. Journal of Personality and Social Psychology, 46, 404-421.

Gangstad, S. N., & Simpson, J. A. (2000). The evolution of human mating: Trade-offs and Strategic Pluralism. Behavioral and Brain Sciences, 23, 573-644.

Gilbert, P., Price, J., & Allan, S. (1995). Social comparison, social attractiveness and evolution: How might they be related? New Ideas in Psychology, 13 (2), 149-165.

Greenberg, J., Pyszczynski, T., Solomon, S., Pinel, E., Simon, L., & Jordan, K. (1993). Effects of self-esteem on vulnerability-denying defensive distortions: Further evidence of an anxiety-buffering function of self-esteem. Experimental Social Psychology, 29, 229-251.

Gutierrez, S. E., Kenrick, D. T., & Partch, J. J. (1999). Beauty, dominance, and the mating game: Contrast effects in self-assessment reflect gender differences in mate selection. Personality and Social Psychology Bulletin, 25 (9), 1126-1134.

Heatherton, T.F., & Polivy, J. (1991). Development and validation of a scale for measuring state self-esteem. Journal of Personality and Social Psychology, 60, 895-910.

Holmbeck, G. N. (1997). Toward terminology, conceptual, and statistical clarity in the study of mediators and moderators: Examples from the child-clinical and pediatric psychology literatures. Journal of Consulting and Clinical Psychology, 65, 599-610.

Kalick, S. M., & Hamilton, T. E. (1986). The matching hypothesis reexamined. Journal of Personality and Social Psychology, 51, 673-682.

Kenrick, D. T., Groth, G.E., Trost, M. R., & Sadalla, E. K. (1993). Integrating evolutionary and social exchange perspectives on relationships: Effects of gender, self-appraisal, and involvement level on mate selection criteria. Journal of Personality and Social Psychology, 64, 951-969.

Kenrick, D. T., Neuberg, S. L., Zierk, K. L., & Krones, J. M. (1994). Evolution and social cognition: Contrast effects as a function of sex, dominance, and physical attractiveness. Personality and Social Psychology Bulletin, 20 (2), 210-217.

Kiesler, S. B., & Baral, R. L. (1970). The search for a romantic partner: The effects of self-esteem and physical attraction on romantic behavior. In K. J. Gergen & D. Marlowe (Eds.). Personality and Social Behavior. Reading, MA: Addison-Wesley Publishing company.

Kirkpatrick, L. A., & Ellis, B. J. (2001). An evolutionary-psychological approach to self-esteem: Multiple domains and multiple functions. In G.J.O. Fletcher & M.S. Clark (Eds.). Blackwell Handbook of Social Psychology: Interpersonal Processes. Oxford, UK: Blackwell Publishers.

Kling, K. C., Hyde, J. S., Showers, D. J., & Buswell, B. N. (1999). Gender differences in self-esteem: A meta-analysis. Psychological Bulletin, 124, 470-500.

Krebs, D. L., & Denton K. (1997). Social illusions and self-deception: the evolution of biases in person perception. In J. Simpson and D. Kenrick (Ed.s) (1997). Evolutionary Social Psychology. Mahwah, New Jersey: Lawrence Erlbaum Associates, Publishers.

Kurzban, R., & Leary, M. R. (2001). Evolutionary origins of stigmatisation: The functions of social exclusion. Psychological Bulletin, 127 (2), 187-208.

Lalumiere, M., Seto, M. & Quinsey V. (1995). Self-perceived mating success and the mating choices of human males and females. (Unpublished).

Leary, M. R., Cottrell, C. A. & Phillips, M. (2001). Deconfounding the effects of dominance and social acceptance on self-esteem. Journal of Personality and Social Psychology, 81 (5), 898-909.

Leary, M. R., & Downs, D. L. (1995). Interpersonal functions of the self-esteem motive: The self-esteem system as a sociometer. In M. H. Kernis (Eds.). Efficacy, Agency, and Self-Esteem (pp. 123-144). New York: Plenum.

Leary, M. R., Haupt, A. L., Strausser, K. S. & Chokel, J. T. (1998). Calibrating the sociometer: The relationship between interpersonal appraisals and state self-esteem. Journal of Personality and Social Psychology, 74 (5), 1290-1299.

Leary, M. R., Tambor, E. S., Terdal, S. K., & Downs, D. L. (1995). Self-esteem as an interpersonal monitor: The sociometer hypothesis. Journal of Personality and Social Psychology, 68, 518-530.

McFarland, D., & Ross, M. (1982). Impact of causal attributions on affective reactions to success and failure. Journal of Personality and Social Psychology, 43, 937-946.

Regan, P. C. (1998). Minimum mate selection standards as a function of perceived mate value, relationship context, and gender. Journal of Psychology & Human Sexuality, 10(1), 53-73.

Tesser, A., Martin, L. L., & Cornell. (1988). Toward a self-evaluation maintenance model of social behavior. In L. Berkowitz (Ed.). Advance in Experimental Social Psychology (Vol. 21, pp. 181-227). San Diego, CA: Academic Press Inc.

Udry, J. R., & Eckland, B. K. (1984). Benefits of being attractive: Differential payoffs for men and women. Psychological Reports, 54, 47-56.

Wade, T. J. (2000). Evolutionary theory and self-perception: Sex differences in body esteem predictors of self-perceived physical and sexual attractiveness and self-esteem. International Journal of Psychology, 35(1), 36-45.

Wiederman, M. N., & Dubois, S. L. (1998). Evolution and sex differences in preferences for short-term mates: Results from a policy capturing study. Evolution and Human Behavior, 19, 153-170.

Appendix A

**Please complete the following questionnaire. Shortly after its completion you may be contacted to participate in various studies currently being conducted within the Psychology department at the University of Canterbury.**

Full Name:

Telephone Number:

Email Address:

Age:

Psyc 104 Lab Stream:

**What is your current relationship status? (Please circle one)**

- Single
- Dating relationship (not living together)
- Dating relationship (living together)
- Married
- Separated/Divorced
- Widowed

**If you are currently in a relationship, how long have you been together?**

\_\_\_\_\_years                      \_\_\_\_\_months

Please circle the number that best describes how you feel.

				neither				
Good	1	2	3	4	5	6	7	Bad
Competent	1	2	3	4	5	6	7	Incompetent
Humble	1	2	3	4	5	6	7	Proud
Adequate	1	2	3	4	5	6	7	Inadequate
Useless	1	2	3	4	5	6	7	Useful
Inferior	1	2	3	4	5	6	7	Superior
Smart	1	2	3	4	5	6	7	Dumb
Unconfident	1	2	3	4	5	6	7	Confident
Worthless	1	2	3	4	5	6	7	Valuable
Important	1	2	3	4	5	6	7	Unimportant
Effective	1	2	3	4	5	6	7	Ineffective
Unsatisfied	1	2	3	4	5	6	7	Satisfied

Appendix B

## Information Sheet

University of Canterbury

Department of Psychology

You are invited to participate as a subject in the research project – Impression Formation Study.

The aim of this project is to assess how individuals use information to make decisions about who they do and do not want to go on dates with, also to evaluate possible profiles for a dating agency.

Your involvement in this project will involve answering six questions from three other participants in the study; you will receive feedback from them based on your responses to their questions. You will then be asked to rate nine opposite sex profiles on a computer. This process should take approximately 30 minutes. You have the right to withdraw from the project at any time, including withdrawal of any information provided.

In the performance of the tasks and application of the procedures there are no risks foreseen.

The results of the project may be published, but you can be assured of the complete confidentiality of data gathered in this investigation: the identity of participants will not be made public without their consent. To ensure anonymity and confidentiality, all information provided will be securely protected electronically and physically.

The project is being carried out as a requirement for completion of Master's of Arts Thesis by Sarah Cathrine Robins under the supervision of Dr. Bruce Ellis, who can be contacted at Phone: 364-2987 Ext 8090. He will be pleased to discuss any concerns you may have about participation in the project.

The project has been reviewed *and approved* by the University of Canterbury Human Ethics Committee.



Appendix C

**Consent Form**

---

Sarah Cathrine Robins  
  
Psychology Department  
University of Canterbury  
P O Box 4800  
Christchurch

Date

CONSENT FORM

**Impression Formation Study**

I have read and understood the description of the above-named project. On this basis I agree to participate as a subject in the project, and I consent to publication of the results of the project with the understanding that anonymity will be preserved.

I understand also that I may at any time withdraw from the project, including withdrawal of any information I have provided.

NAME (please print): .....

Signature: .....

Date: .....

Appendix D

Demographics Questionnaire

Age: \_\_\_\_\_ Gender:        Male                Female

Current year of study: (circle one answer)

- First
- Second
- Third
- Fourth
- Fifth or more

Current relationship status: (circle all that apply)

- Single
- Dating multiple people
- Dating one person exclusively
- Dating relationship - living together
- Engaged to be married
- Married
- Separated / Divorced
- Widowed

If you are currently in an steady dating or marital relationship, how long have you been together?

\_\_\_\_\_years    &    \_\_\_\_\_months

Number of children under 18 years currently in your care: \_\_\_\_\_

Ethnicity: (circle all that apply)

- |                 |                         |
|-----------------|-------------------------|
| European        | Chinese                 |
| Maori           | Japanese                |
| Pacific Islands | Korean                  |
| Indian          | Other (please specify): |
| African         | _____                   |

Sexual Orientation:    Heterosexual  
                                 Homosexual  
                                 Bisexual

Appendix E

**Please answer each of the following questions regarding the participant's responses to all questions.**

1.

Would you want to continue a conversation with the participant?

No

Unsure

Yes
2.

Would you want to introduce the participant to a friend?

No

Unsure

Yes
3.

Would you be interested in having coffee with this person?

No

Unsure

Yes
4.

Would you be interested in going on a date with this person?

No

Unsure

Yes
5.

Does this seem like the kind of person who you would be interested in forming a dating relationship with?

No

Unsure

Yes

Appendix F

Please circle the number that best describes how you currently feel.

	Neither							
Good	1	2	3	4	5	6	7	Bad
Competent	1	2	3	4	5	6	7	Incompetent
Socially Attractive	1	2	3	4	5	6	7	Socially Unattractive
Humble	1	2	3	4	5	6	7	Proud
Adequate	1	2	3	4	5	6	7	Inadequate
Popular	1	2	3	4	5	6	7	Unpopular
Useless	1	2	3	4	5	6	7	Useful
Inferior	1	2	3	4	5	6	7	Superior
Accepted	1	2	3	4	5	6	7	Rejected
Smart	1	2	3	4	5	6	7	Dumb
Unconfident	1	2	3	4	5	6	7	Confident
Worthless	1	2	3	4	5	6	7	Valuable
Important	1	2	3	4	5	6	7	Unimportant
Undesirable	1	2	3	4	5	6	7	Desirable
Effective	1	2	3	4	5	6	7	Ineffective
Unsatisfied	1	2	3	4	5	6	7	Satisfied
Disliked	1	2	3	4	5	6	7	Liked

Appendix G

Profile Evaluation Form

Please look at the picture and read the accompanying information. Then answer each of the following questions.

1.

Realistically, does this seem like the kind of person you would form a dating relationship with?

1

definitely not

2

3

4

5

6

7

definitely yes
2.

How comfortable do you think you would be dating this person?

1

not at all comfortable

2

3

4

5

6

7

extremely comfortable
3.

Does this seem like the kind of person who you would successfully date?

1

definitely not

2

3

4

5

6

7

definitely yes
4.

How likely do you think it is that this person would be interested in you?

1

not at all likely

2

3

4

5

6

7

extremely likely
5.

How well matched are you to this person?

1

not matched at all

2

3

4

5

6

7

very well matched

Appendix H

Personal Description (High Social Attractiveness)

Scale rating percentile equivalents:

1	2	3	4	5
lowest 5%	lower 30%	middle 30%	higher 30%	highest 5%

Age: 20  
Favourite Food: black liquorice  
Occupation: Student

*Even tempered:* High scorers have an even temper. Their mood is quite stable. A low scorer has moods that tend to go up and down, and are vulnerable to feeling anxious, guilty or just miserable for no good reason.

1	2	3	4	5
---	---	---	---	---

*Socially Visible:* High scorers are natural leaders. When they speak people listen. High scorers are poised and self-assured and enjoy being in the spotlight. They can liven up a dull party. Low scorers are more yielding and submissive. They would rather listen than talk and would rather not be the centre of attention.

1	2	3	4	5
---	---	---	---	---

*Absorbed:* High scorers can become so deeply involved in their thoughts, memories or daydreams that they experience these almost as if they were really happening. Low scorers do not tend to have these experiences.

1	2	3	4	5
---	---	---	---	---

*Athletic:* High scorers are good at sports and enjoy physical activity. They have lots of energy and like to compete. Low scorers are much less active and do not enjoy physical activity.

1	2	3	4	5
---	---	---	---	---

*Image-prone:* High scorers have thoughts which come as images or pictures. Sounds, textures, or smells may have distinctive colours for them. Low scorers don't have such experiences.

1	2	3	4	5
---	---	---	---	---

*Sociable:* High scorers like to be with people. They enjoy working and spending leisure time with others and find it easy to make friends. Others are attracted to them. Low scorers are usually happier alone and prefer to work with things rather than people, and do (or would) not mind living alone. Others are not often attracted to them.

1	2	3	4	5
---	---	---	---	---

Personal Description (Low Social Attractiveness)

Scale rating percentile equivalents:

1	2	3	4	5
lowest 5%	lower 30%	middle 30%	higher 30%	highest 5%

Age: 23  
Favourite Food: chocolate  
Occupation: Student

*Even tempered:* High scorers have an even temper. Their mood is quite stable. A low scorer has moods that tend to go up and down, and are vulnerable to feeling anxious, guilty or just miserable for no good reason.

1 2 3 4 5

*Socially Visible:* High scorers are natural leaders. When they speak people listen. High scorers are poised and self-assured and enjoy being in the spotlight. They can liven up a dull party. Low scorers are more yielding and submissive. They would rather listen than talk and would rather not be the centre of attention.

1 2 3 4 5

*Absorbed:* High scorers can become so deeply involved in their thoughts, memories or daydreams that they experience these almost as if they were really happening. Low scorers do not tend to have these experiences.

1 2 3 4 5

*Athletic:* High scorers are good at sports and enjoy physical activity. They have lots of energy and like to compete. Low scorers are much less active and do not enjoy physical activity.

1 2 3 4 5

*Image-prone:* High scorers have thoughts which come as images or pictures. Sounds, textures, or smells may have distinctive colours for them. Low scorers don't have such experiences.

1 2 3 4 5

*Sociable:* High scorers like to be with people. They enjoy working and spending leisure time with others and find it easy to make friends. Others are attracted to them. Low scorers are usually happier alone and prefer to work with things rather than people, and do (or would) not mind living alone. Others are not often attracted to them.

1 2 3 4 5

## Appendix I

## Personality Description Pre-Rating Scale

Please read the personality description provided. Then rate each description in terms of its *social attractiveness*.

1.	1	2	3	4	5	6	7	8	9	10
not at all socially attractive										very socially attractive
2.	1	2	3	4	5	6	7	8	9	10
not at all socially attractive										very socially attractive
3.	1	2	3	4	5	6	7	8	9	10
not at all socially attractive										very socially attractive
4.	1	2	3	4	5	6	7	8	9	10
not at all socially attractive										very socially attractive
5.	1	2	3	4	5	6	7	8	9	10
not at all socially attractive										very socially attractive
6.	1	2	3	4	5	6	7	8	9	10
not at all socially attractive										very socially attractive
7.	1	2	3	4	5	6	7	8	9	10
not at all socially attractive										very socially attractive
8.	1	2	3	4	5	6	7	8	9	10
not at all socially attractive										very socially attractive
9.	1	2	3	4	5	6	7	8	9	10
not at all socially attractive										very socially attractive



Appendix J

Photo Pre-Rating Scale

Please look at the picture provided. Then rate each individual in terms of his/her *physical attractiveness*.

1.	1	2	3	4	5	6	7	8	9	10
not at all physically attractive									very physically attractive	
2.	1	2	3	4	5	6	7	8	9	10
not at all physically attractive									very physically attractive	
3.	1	2	3	4	5	6	7	8	9	10
not at all physically attractive									very physically attractive	
4.	1	2	3	4	5	6	7	8	9	10
not at all physically attractive									very physically attractive	
5.	1	2	3	4	5	6	7	8	9	10
not at all physically attractive									very physically attractive	
6.	1	2	3	4	5	6	7	8	9	10
not at all physically attractive									very physically attractive	
7.	1	2	3	4	5	6	7	8	9	10
not at all physically attractive									very physically attractive	
8.	1	2	3	4	5	6	7	8	9	10
not at all physically attractive									very physically attractive	
9.	1	2	3	4	5	6	7	8	9	10
not at all physically attractive									very physically attractive	
10.	1	2	3	4	5	6	7	8	9	10
not at all physically attractive									very physically attractive	

Appendix K

**Feedback Evaluation**

**Please answer each of the following questions regarding the feedback you received earlier.**

1. Overall, how positively was your information regarded?

1	2	3	4	5	6	7
extremely negatively						extremely positively

2. Overall, how accepting were the other people of you?

1	2	3	4	5	6	7
not at all accepting						very accepting

3. Did you believe that the other people were the ones who completed those ratings that you received?

- A. Yes
- B. No